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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,439	02/19/2004	Andre Georges Cook	DN1999227USAD01	5644

27280 7590 06/25/2007  
THE GOODYEAR TIRE & RUBBER COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT 823  
1144 EAST MARKET STREET  
AKRON, OH 44316-0001

EXAMINER
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AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

MAIL DATE	DELIVERY MODE
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06/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/782,439

Applicant(s)

COOK ET AL.

Examiner

Jeff H. Aftergut

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5-25-07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of U.K. 2,009,362 and Burnham '401 for the same reasons as expressed in paragraph 2 of the Office Action dated 1-23-07.

The admitted prior art is cited for the same reasons as previously noted. It should be noted that the claims as presented are in Jepson form. As such, the applicant has admitted that it was not only known to form a hose base on a rotating mandrel, feeding a length of material onto the mandrel as the mandrel rotates to build up the hose base on the mandrel and feeding a length of a second material in the form of a reinforcing rod onto the mandrel as the mandrel rotates to form a helical reinforcement on the hose base followed by curing of the hose base but also the applicant has admitted that in such processing it was known to form the build up of the hose to include at least one layer of reinforcing material along the length of the hose prior to application of the second length of material in the form of a reinforcing rod. In other words, the applicant has admitted that it was known to form a hose assembly which included an interior reinforcement which was initially formed upon the hose followed by the application of an exterior reinforcement which included a reinforcing rod thereon. The admitted prior art failed to teach that one would have modified a portion of the hose base having the interior reinforcement therein prior to feeding the reinforcing rod (secondary reinforcement) thereon.

The reference to U.K. '362 evidenced that it was known in the formation of a hose base to provide an end region of the hose which was provided with an interior reinforcement but which lacked an exterior reinforcement therein. More specifically, the reference taught that one provided a single layer of reinforcement 2 along the length of the hose followed by the application of an additional reinforcement 3 helically about the hose. The reference taught that subsequent to formation and vulcanization (curing) of the hose, one skilled in the art would have removed the second reinforcing material at the ends of the hose by helically cutting the hose and pulling the reinforcement 3 out at the ends in order to provide a hose with a cuff. The reference additionally taught that subsequent to the removal of the reinforcement 3 at the ends of the hose one cut the end of the reinforcing material which was removed and bent it back and secured the end of the reinforcement to the hose. One applied an adhesive tape 6 over the cut portion of the remaining reinforcement 3. The reference to U.K. '362 clearly suggested that those skilled in the art at the time the invention was made would have understood to incorporate a reinforcement in a hose internally therein as well as a second reinforcement about the exterior of the hose wherein at the end of the hose where it was desired to have a cuff one skilled in the art would have removed the end portion of the reinforcement. The reference did not remove the reinforcement by treating the hose length to create non-adhesive regions therein but rather removed the reinforcement subsequent to the curing or vulcanization of the hose to form the cuff therein. This clearly required the additional step of cutting the vulcanized material of the hose helically to facilitate removal of the reinforcement 2 in the cuff region. As an alternative

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to removal in this fashion and to avoid having to take the time consuming step of cutting the hose in this fashion to facilitate removal of the end portion of the reinforcement, it would have been obvious to one of ordinary skill in the art to treat the material of the hose (vulcanize it) so that the reinforcement was not secured at the end region of the hose in light of the teachings of Burnham '401.

Burnham '401 is discussed at length in paragraph 2 of the Office action dated 9-7-06 and applicant is referred to the same for a complete discussion of the reference. More specifically, Burnham suggested that it was known at the time the invention was made to make a tubular product on a mandrel wherein one applied material upon the mandrel followed by application of helical reinforcement to the mandrel wherein one performed a step of modifying a portion of the tube in length M via application of a curing material for the curable resin (for example) which made up the core tube which was having the reinforcement 63 applied thereto. It should be noted that the curing agent was applied prior to the introduction of the reinforcement onto the tube whereby the tubular structure was hardened so that the reinforcement (in this case a wire) was not embedded within the tube but rather remained upon the surface of the same. Additionally, the tube was advanced past the winding device without rotation of the winding device whereby the wire was applied along the axis of the tube generally axially thereon. The reference to Burnham also suggested that such an application (in the axial direction without rotation of the winding device) would have resulted in a reduction in the tension of the wire as it was applied axially of the tube. The reference to Burnham suggested that those skilled in the art would have severed the exposed reinforcing wire

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after tube formation in order to provide the tube with a tip portion which was unreinforced, see column 12, lines 1-14. The applicant is additionally referred to column 11, lines 40-67 for a description of the application of the reinforcement to the tube wherein one applied the curing material to the curable resin of the tube prior to the application of the reinforcement thereon. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the techniques of Burnham to provide a region of reinforcement which was not integral with the finished assembly and which was easily removed from the tube as it was not embedded within the tubular body during manufacture by pretreating the surface of the tube to prevent such embedding when making a hose and/or tubular body where it was desirable to provide a end region of a hose without a second exterior reinforcement while retaining an interior reinforcement as taught by U.K. 2,009,362 made in accordance with the wrapping techniques of the admitted prior art. Note that the use of the treatment of the hose length about the exterior in Burnham provided an easy way to expose the reinforcement about the exterior wherein cutting of the hose at the end in a helical fashion was unnecessary to expose the reinforcement for removal of the same (which was required by U.K. '362).

With regard to claim 5, note that the reference to Burnham suggested that those skilled in the art would have modified the tube length by application of a curing agent for the curable material of the tube thereby preventing the embedding of the reinforcement within the tube. Regarding claim 6 note that one skilled in the art would have understood that in order to provide a tip portion which was unreinforced that the

assembly was severed at the locations where the reinforcement was removed.

Regarding claim 7, the applicant is advised that there must be relative rotational movement between the wire dispenser and the mandrel in order to angularly apply the same, in the reference to Burnham this was provided by rotation of the reinforcement guide as the mandrel was fed axially past. In the admitted prior art it was provided by rotation of the mandrel and axially passing the wire guide along the axis. When one desired to provide the unreinforced region in Burnham, one simply stopped the rotation of the wire guide wherein the wire was applied along the axis of the mandrel. To provide the wire along the axis of the mandrel in the admitted prior art as the wire guide was moved along the axis, one skilled in the art would have understood that the rotation of the mandrel would have ceased in order to provide longitudinal reinforcement thereon. There is no other means to provide longitudinal reinforcement in the winding system of the admitted prior art which was clearly desirable in accordance with the provision of the non-reinforced regions in Burnham. Regarding claim 8, note that the reference suggested that those skilled in the art would have understood that as the wire was applied longitudinally of the tube its tension would have been reduced.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of claim 6, the language "the hose length" appears which lacks proper antecedent basis. It should be noted that the word "length" was changed to --base-- in claim 4 in the amendment. It is suggested that "length" be changed to --base--.

***Response to Arguments***

5. Applicant's arguments filed 5-25-07 have been fully considered but they are not persuasive.

The applicant argues that the references to U.K. '362 and Burnham '4501 are both only concerned with the removal of an internal reinforcement and not an external reinforcement for a hose or tube. The applicant is advised that one skilled in the art at the time the invention was made would have understood that when making a cuffed hose one would have desired to remove reinforcement disposed on the hose and that the exterior most reinforcement in the hose is what would have been removed as evidenced by U.K. '362. The specific technique utilized to remove the reinforcement would have included those suggested by Burnham '401 whether the reinforcement was disposed about the exterior of the hose or an external reinforcement disposed within the hose assembly. Both Burnham '401 and U.K. '362 are relevant to the question of obviousness as to how one skilled in the art would have gone about removal of the reinforcement at the end of the hose to attain a cuffed hose assembly therein. No claims are allowed.




**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1733

JHA  
June 22, 2007